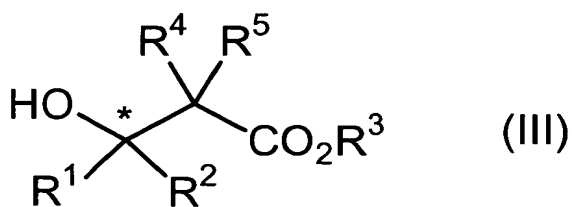


WHAT WE CLAIMED ARE:

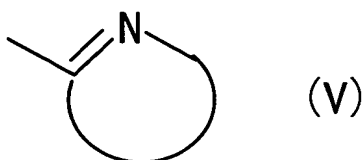
1. A method for producing an optically active β -hydroxy ester compound represented by the general formula:



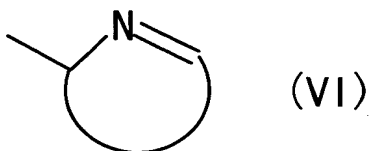
wherein

R^1 represents a hydrogen atom, an optionally substituted hydrocarbon group, or an optionally substituted heterocyclic group,

10 R^2 represents a nitrogen-containing heterocyclic group different from R^1 , which is represented by the general formula:

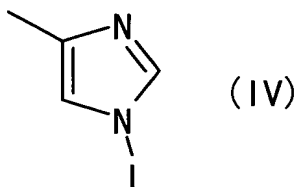


wherein the ring may be substituted, and may have one or more heteroatoms in addition to the nitrogen atom in the formula, and
15 may have one or more double bonds in addition to the double bond in the formula; or the general formula:



wherein the ring may be substituted, and may have one or more heteroatoms in addition to the nitrogen atom in the formula, and

may have one or more double bonds in addition to the double bond in the formula, provided that a case is eliminated where R^1 is an optionally substituted aromatic group and R^2 is a group represented by the general formula:



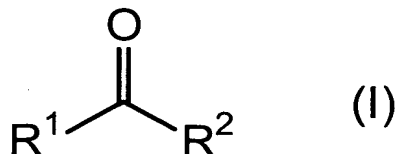
5

wherein L represents a protecting group,

R^3 represents an optionally substituted hydrocarbon group or an optionally substituted heterocyclic group,

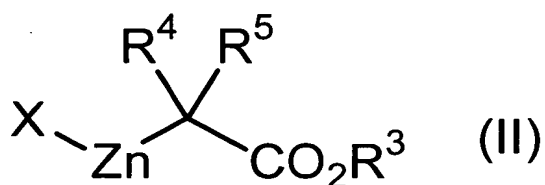
R^4 and R^5 are the same or different, and represent a hydrogen atom, a halogen atom, an optionally substituted silyl group, an optionally substituted hydrocarbon group or an optionally substituted heterocyclic group, and (1) R^3 and R^4 , (2) R^3 and R^5 , or (3) R^4 and R^5 may be taken together to form a ring, wherein said ring may be substituted,

the symbol "*" represents an optically active center, or a salt thereof, which comprises reacting, in the presence of a cinchona alkaloid or a salt thereof, a compound represented by the general formula:



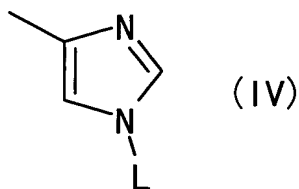
wherein R^1 and R^2 are as defined above or a salt thereof with a compound represented by the general formula:

20



wherein R^3 , R^4 and R^5 are as defined above, and X is a halogen atom, or a polymer thereof or a salt thereof.

- 5 2. The method according to claim 1, which further comprises adding a base.
3. The method according to claim 2, wherein the base is pyridine.
- 10 4. The method according to claim 1, wherein the cinchona alkaloid is cinchonine, cinchonidine, quinine, or quinidine.
5. The method according to claim 1, wherein R^2 is an optionally substituted 2-pyridyl group or 4-imidazolyl group.
- 15 6. The method according to claim 1, wherein R^1 is a hydrogen atom, an optionally substituted aliphatic hydrocarbon group, or an optionally substituted heterocyclic group, and R^2 is a group different from R^1 , which is represented by the general formula:



wherein L represents a protecting group.